

Statement of Basis

International Paper Company
Autauga County
Facility No. 201-0001

This is a proposed renewal of an existing Title V Major Source Operating Permit. The original permit was issued on November 1, 2003, and expired on October 31, 2008.

International Paper Company operates a pulp and paper mill in the city of Prattville, Autauga County, Alabama. The mill produces unbleached kraft paperboard.

International Paper Company is a major Title V facility with significant emissions of particulate matter (PM), nitrogen oxides (NO_x), sulfur dioxide (SO₂), carbon monoxide (CO), volatile organic compounds (VOC), total reduced sulfur (TRS) and hazardous air pollutants (HAPS).

The following is a summary of sources, regulations, and periodic monitoring.

Digesters

The K1 digester was installed prior to the applicability date for 40 CFR Part 60, Subpart BB, and is not subject to that NSPS. It is subject to the State Only regulations for TRS found in 335-3-5-.04. Digester's K2 and K3 are subject to 40 CFR Part 60, Subpart BB.

All three digesters are subject to the MACT found in 40 CFR Part 63, Subpart S.

Pollutants	Limitation	Regulations	Monitoring
HAPs (K1, K2, K3)		40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S
TRS (K2 & K3)	Incineration	40 CFR Part 60, Subpart BB	Once per day, ensure the gases are being incinerated.
TRS (K1)	Incineration	335-3-5-.04 (5) (State only)	Once per day, ensure the gases are being incinerated.

Brown Stock Washers

Brown Stock Washers No.s 1, 2, and 3 were installed prior to the applicability date for the NSPS found in 40 CFR Part 60, Subpart BB. No.s 4 and 5 are subject to that NSPS.

All the brown stock washers are subject to the MACT found in 40 CFR Part 63, Subpart S.

Pollutants	Limitation	Regulations	Monitoring
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HAPs (All)		40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S
TRS (No.s 4 & 5)	Incineration	40 CFR Part 60, Subpart BB	Once per day, ensure the gases are being incinerated.

Evaporators

The E1 evaporator was installed prior to the applicability date for 40 CFR Part 60, Subpart BB, and is not subject to that NSPS. It is subject to the State Only regulations for TRS found in 335-3-5-.04. Evaporator's E2 and E3 are subject to 40 CFR Part 60, Subpart BB.

All evaporators are subject to the MACT found in 40 CFR Part 63, Subpart S.

Pollutants	Limitation	Regulations	Monitoring
HAPs (All)		40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S
TRS (E2 & E3)	Incineration	40 CFR Part 60, Subpart BB	Once per day, ensure the gases are being incinerated.
TRS (E1)	Incineration	335-3-5-.04 (5) (State only)	Once per day, ensure the gases are being incinerated.

No. 1 Lime Kiln

The No. 1 Lime Kiln was installed prior to the applicability date of the NSPS found in 40 CFR Part 60, Subpart BB.

It is subject to the State particulate standard for Kraft Pulp Mills, as listed in 335-3-4-.07. It is also subject to the State Only TRS standard found in 335-3-5-.04. The unit is subject to the State opacity regulations found in 335-3-4-.01, but no monitoring was required because the unit is controlled with a scrubber.

The No. 1 Lime Kiln is subject to the MACT standard listed in 40 CFR Part 63, Subpart MM. The PM (as a surrogate for HAPs) limit of 0.36 gr/dscf is an approved alternative limit established under the provisions of §63.862 (a)(1)(ii).

Equivalency by Permit

It should be noted that the language in the permit states that the No. 1 Lime Kiln may be included in the Bubble allowed under §63.862 (a)(1)(ii) regardless of the number of hours that it operates. This alternative was approved through the Equivalency By Permit (EBP) process outlined in §63.94. Approval was granted by EPA in a letter dated August 20,

2009. A copy of the letter and the Department's submittal to EPA is included as appendix A to this Statement of Basis.

Pollutants	Limitation	Regulations	Monitoring
PM	1.0 lb/air dried ton of pulp	335-3-4-.07	Annual Stack Test/three hour average lime mud feed rate
Opacity	20%	335-3-4-.01	None (wet stack)
PM as a surrogate for HAPS	0.36 gr/dscf	40 CFR Part 63, Subpart MM	Continuous monitor on scrubber flow rate and pressure drop.
TRS	20 ppm	335-3-5-.04 (6) (State only)	Continuous emissions monitor

No. 2 Lime Kiln

The No. 2 Lime Kiln is subject to the NSPS found in 40 CFR Part 60, Subpart BB, with appropriate limitations on PM and TRS emissions.

This unit received a synthetic minor for PSD emission limitation on SO₂ emissions. The unit is subject to the State opacity regulations found in 335-3-4-.01, but no monitoring was required because the unit is controlled with a scrubber.

The No. 2 Lime Kiln is subject to the MACT standard listed in 40 CFR Part 63, Subpart MM. The PM (as a surrogate for HAPS) limit of 0.1 gr/dscf is an approved alternative limit established under the provisions of §63.862 (a)(1)(ii).

Pollutants	Limitation	Regulations	Monitoring
PM (petcoke and/or oil)	0.13 gr/dscf or 42 lbs/hr	40 CFR Part 60, Subpart BB and 335-3-14-.04 (9)	Annual Stack Test/three hour average lime mud feed rate
PM (gas)	0.067 gr/dscf or 21 lbs/hr	40 CFR Part 60, Subpart BB and 335-3-14-.04 (9)	Annual Stack Test/three hour average lime mud feed rate
TRS	8 ppm	40 CFR Part 60, Subpart BB	Continuous emissions monitor
SO ₂	39 tons per year	335-3-14-.04 (9)	Fuel oil and petcoke vendor certification of sulfur content
Opacity	20%	335-3-4-.01	None (wet stack)
PM as a surrogate for HAPS	0.1 gr/dscf	40 CFR Part 63, Subpart MM	Continuous monitor on scrubber flow rate and pressure drop

No. 1 Power Boiler

The No. 1 Power Boiler was installed prior to the applicability dates of the NSPSs found in 40 CFR Part 60, Subparts D, Da, or Db.

The boiler is subject to the State's particulate emission limitations found in 335-3-4-.03 for fuel burning equipment. The unit is subject to the State opacity regulations found in 335-3-4-.01, but no monitoring was required because the unit is controlled with a wet ESP.

As a result of a modification, the facility accepted a synthetic minor for PSD emission limitation on SO₂.

The permits requirements for monitoring the total power levels of the ESP are sufficient for Compliance Assurance Monitoring.

Pollutants	Limitation	Regulations	Monitoring
PM	0.12 lbs/mmbtu	335-3-4-.03	Wet ESP Wash Flow/three hour average total power
SO ₂	900 lbs/hr	335-3-14-.04	Three hour average steam production rate
Opacity	20%	335-3-4-.01	None (wet stack)

No. 2 Power Boiler

The No. 2 Power Boiler is subject to the NSPS found in 40 CFR Part 60, Subpart D, and has limitations for PM, SO₂, NO_x, and Opacity. The combination of an annual test, monitoring of steaming rate, and a continuous opacity monitor are sufficient for CAM.

Pollutants	Limitation	Regulations	Monitoring
PM	0.1 lbs/mmbtu or 61 lbs/hr	40 CFR Part 60, Subpart D and 334-3-14-.04	Annual test/three hour average steaming rate
SO ₂	1.2 lbs/mmbtu or 572 lbs/hr	40 CFR Part 60, Subpart D and 334-3-14-.04	Fuel oil and coal vendor certification of sulfur content/Stack test every five years
NO _x	0.7 lbs/mmbtu or 427 lbs/hr	40 CFR Part 60, Subpart D and 334-3-14-.04	Continuous emissions monitor
Opacity	20%	40 CFR Part 60, Subpart D and 334-3-14-.04	Continuous opacity monitor

No. 1 Recovery Furnace

The No. 1 Recovery Furnace was constructed prior to the applicability date listed in 40 CFR Part 60, Subpart BB. The unit is subject to the state regulations for PM and TRS emissions.

The recovery furnace is subject to the opacity and PM limits listed in 40 CFR Part 63, Subpart MM. The PM (as a surrogate for HAPs) limit of 0.023 gr/dscf is an approved alternative limit established under the provisions of §63.862 (a)(1)(ii).

Pollutants	Limitation	Regulations	Monitoring
PM	1.11 lb/air dried ton of pulp or 60 lbs/hr	335-3-4-.07 (5) and 335-3-14-.04 (9)	Annual test/three hour black liquor firing rate
TRS	20 ppm	335-3-5-.04 and 335-3-14-.04 (9)	Continuous emissions monitor
Opacity	35%	40 CFR Part 63, Subpart MM	Continuous opacity monitor
PM as a surrogate for HAPS	0.023 gr/dscf	40 CFR Part 63, Subpart MM	Continuous opacity monitor/three hour black liquor firing rate

No. 1 Smelt Dissolving Tank

The No. 1 Smelt Dissolving Tank was constructed prior to the applicability date listed in 40 CFR Part 60, Subpart BB. The unit is subject to the state regulations for PM and and the State Only regulations for TRS emissions.

The unit is subject to the State opacity regulations found in 335-3-4-.01, but no monitoring was required because the unit is controlled with a scrubber.

The SDT is subject to the limits listed in 40 CFR Part 63, Subpart MM. The PM (as a surrogate for HAPs) limit of 0.25 lbs/ton of BLS is an approved alternative limit established under the provisions of §63.862 (a)(1)(ii).

Pollutants	Limitation	Regulations	Monitoring
PM	0.5 lbs/air dried ton of pulp	335-3-4-.07	Annual test/three hour black liquor firing rate
TRS	0.033 lb/ton of black liquor	335-3-5-.04 (State only)	Continuous monitor on dilute caustic recirculation flow rate
Opacity	20%	335-3-4-.01	None (wet stack)
PM as a surrogate for HAPS	0.25 lbs/ton of black liquor	40 CFR Part 63, Subpart MM	Continuous monitor on scrubber flow rate and pressure drop

No. 2 Recovery Furnace

The No. 2 Recovery Furnace is subject to the PM and TRS NSPS limits found in 40 CFR Part 60, Subpart BB.

The recovery furnace has a BACT limit of 250 ppm or 482 lbs/hr for SO₂.

The recovery furnace is subject to the opacity and PM limits listed in 40 CFR Part 63, Subpart MM. The PM (as a surrogate for HAPs) limit of 0.024 gr/dscf (stack 1) and 0.024 gr/dscf (stack 2) is an approved alternative limit established under the provisions of §63.862 (a)(1)(ii).

Pollutants	Limitation	Regulations	Monitoring
PM	0.044 gr/dscf or 73 lbs/hr	40 CFR Part 60, Subpart BB	Annual test/three hour black liquor firing rate
TRS	5 ppm or 7 lbs/hr	40 CFR Part 60, Subpart BB	Continuous emission monitor
SO ₂	250 ppm or 482 lbs/hr	335-3-14-.04	Once per 5 years test/three hour black liquor firing rate
Opacity	35%	40 CFR Part 63, Subpart MM	Continuous opacity monitor
PM as a surrogate for HAPS	0.024 gr/dscf (Stack 1)	40 CFR Part 63, Subpart MM	Continuous opacity monitor/three hour black liquor firing rate
PM as a surrogate for HAPS	0.024 gr/dscf (Stack 2)	40 CFR Part 63, Subpart MM	Continuous opacity monitor/three hour black liquor firing rate

No. 2 Smelt Dissolving Tank

The No. 2 Smelt Dissolving Tank is subject to the PM and TRS NSPS limitations found in 40 CFR Part 60, Subpart BB.

The unit is subject to the State opacity regulations found in 335-3-4-.01, but no monitoring was required because the unit is controlled with a scrubber.

The SDT is subject to the limits listed in 40 CFR Part 63, Subpart MM. The PM (as a surrogate for HAPs) limit of 0.19 lbs/ton of BLS is an approved alternative limit established under the provisions of §63.862 (a)(1)(ii).

Pollutants	Limitation	Regulations	Monitoring
PM	0.2 lbs/ton black liquor solids or 16 lbs/hr	40 CFR Part 60, Subpart BB and 335-3-14-.04 (9)	Annual test/three hour black liquor firing rate
TRS	0.033 lb/ton black liquor solids or 2.6 lbs/hr	40 CFR Part 60, Subpart BB and 335-3-14-.04 (9)	Three hour scrubber flow rate
Opacity	20%	335-3-4-.01	None (wet stack)
PM as a	0.19 lbs/ton black	40 CFR Part 63,	Three hour scrubber flow

surrogate for HAPS	liquor solids	Subpart MM	rate and fan amps
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Paper Machines

The paper machines are required to use clean water as part of a BACT determination for VOCs. No monitoring is required.

Pollutants	Limitation	Regulations	Monitoring
VOCs	Clean Water	335-3-14-.04	Work Practice Standard

Pet Coke and Coal Unloading, Crushing and Storage

The Pet Coke and Coal areas are subject to the NSPS in 40 CFR Part 60, Subpart Y. For monitoring, daily opacity checks are required when the units are in operation.

Pollutants	Limitation	Regulations	Monitoring
Opacity	20%	40 CFR Part 60, Subpart Y and 335-3-14-.04	Daily opacity checks

Pulping System Processes

These sources are subject to the MACT regulations found in 40 CFR Part 63, Subpart S.

Pollutants	Limitation	Regulations	Monitoring
HAPs (LVHC)	Incineration	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S
HAPs (HVLC)	Incineration	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S
HAPs LVHC	Leak Detection and Repair	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S

Process Condensates

These sources are subject to the MACT regulations found in 40 CFR Part 63, Subpart S.

Pollutants	Limitation	Regulations	Monitoring
HAPs	Collect at least 7.2 lbs of HAP per ton of Oven Dried Pulp, then reduce by 92%	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S
HAPs	Condensates shall be conveyed by closed collection	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S

	system		
HAPs	Leak Detection and Repair	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S

Enclosures and Closed-Vent Systems

These sources are subject to the MACT regulations found in 40 CFR Part 63, Subpart S.

Pollutants	Limitation	Regulations	Monitoring
HAPs	Leak Detection and Repair	40 CFR Part 63, Subpart S	As required by 40 CFR Part 63, Subpart S

Sources subject only to General Provisos

These are sources that are subject only to the General Provisos, but do not qualify for the Trivial and Insignificant list. No specific limitations or monitoring apply.

Wes Thornhill, Chief
Industrial Chemicals Section
Air Division

December 8, 2009
Date

Appendix A



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

AUG 20 2009

Mr. Ron W. Gore, Chief
Air Division
Alabama Department of
Environmental Protection
1400 Coliseum Boulevard
Montgomery, Alabama 36130-1463

Dear Mr. Gore:

This letter provides the Environmental Protection Agency's (EPA) approval of specific alternative Pulp and Paper Maximum Achievable Control Technology (MACT) 40 Code of Federal Regulations (CFR) Subpart MM compliance requirements for the International Paper Company's Prattville Mill in Prattville, Alabama (IP-Prattville). The authority for this approval is found in Section 112(l) of the Clean Air Act (CAA) and 40 CFR §63.94, which allows for approval of state permit terms and conditions that substitute for a MACT rule. To approve alternative MACT requirements, EPA must find that the criteria specified in 40 CFR §63.94(d) have been met, including a determination that the alternative requirements are equivalent to the MACT requirements (i.e., that the alternative requirements are at least as stringent as the otherwise applicable MACT requirements). 40 CFR Section §63.94 is known as the Equivalency-By-Permit (EBP) regulation. As discussed more fully below, EPA has determined that the criteria set out in the EBP regulation have been met and that the IP-Prattville pre-draft EBP permit terms and conditions included in the enclosure to this letter are equivalent to the otherwise applicable 40 CFR Part 63, Subpart MM requirements.

40 CFR Part 63, Subpart MM sets standards for hazardous air pollutants (HAP) from a mill's chemical recovery system, including recovery furnaces, smelt dissolving tanks, and lime kilns. IP-Prattville operates a number 1 and number 2 recovery furnace, a number 1 and number 2 smelt dissolving tank, and a number 1 and number 2 lime kiln. The number 1 lime kiln is a "swing" unit that operates on mill demand. Due to unfavorable economic conditions in the pulp and paper market, IP-Prattville could experience a reduction in mill production, which has resulted in this EBP action.

The pre-draft terms and conditions represent alternatives to the Subpart MM MACT provisions found at 40 CFR §63.862. Section 63.862 of the MACT standard is applicable to the IP-Prattville facility and allows, among other things, a mill to establish an overall emission limit (bubble limit) for each existing process unit in the chemical recovery system that operate 6,300 hours per year or more. The IP-Prattville alternative, as reflected in the enclosed pre-draft terms and conditions, will allow the number 1 lime kiln to remain in the mill's existing bubble limits even if the unit operation drops to below the required 6,300 hours per year.

EPA has worked closely with Alabama Department of Environmental Management (ADEM) and IP-Prattville on the technical issues associated with determining equivalency for this alternative. After careful review of the original proposal and subsequent documents and information provided by the mill, EPA has determined that the IP-Prattville alternative, as expressed in the enclosed pre-draft permit terms and conditions, will result in HAP emissions reductions in excess of those that would otherwise be obtained by complying with the MACT's control requirements and is, therefore, equivalent (at least as stringent) as the Subpart MM MACT. Thus, EPA approves the enclosed pre-draft EBP permit terms and conditions because the criteria set forth in 40 CFR §63.94(d) have been met.

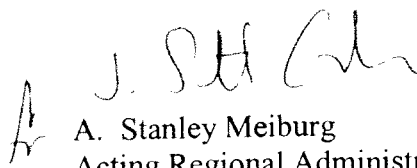
As explained in EPA's Final Rule Amendments to the Approval of State Programs and Delegation of Federal Authorities, 65 FR 55810 (September 14, 2000), the EBP process comprises three steps. The first step is the up-front approval of Alabama's EBP program. This was completed by way of a Direct Final Rule, 69 FR 41757 (July 12, 2004), which became effective on September 10, 2004. The second step is EPA's review and approval of the alternative requirements in the form of pre-draft EBP terms and conditions; this step is completed by this letter. The third and final step of the EBP process is the incorporation of the EPA-approved pre-draft terms and conditions into IP-Prattville's operating permit issued pursuant to Title V of the CAA (Title V permit). The actual delegation to ADEM to implement alternative requirements contained in the Title V permit occurs when the enforceable mechanism, the Title V permit, is issued after the EPA and public comment periods.

It is important to note that how the permit terms and conditions are written into the Title V permit at step three is integral to EPA's final determination that the requirements are equivalent to the MACT standard and that the Title V permit assures compliance with all applicable requirements. Thus, the approved pre-draft permit terms and conditions must be incorporated into the Title V permit *exactly* as approved today. If the requirements we are approving today are changed when written into the final Title V permit at step three, the delegation to ADEM to implement the alternative requirements cannot occur and the MACT standard will continue to apply. Further, please note that all information provided by ADEM to EPA during step two as part of the equivalency demonstration must be made available to the public during the Title V permit review period.

EPA is concurring on the IP-Prattville equivalency project based on information currently available. However, if at a later date EPA concludes, based on additional data and analysis of IP's mill or other mills, that IP-Prattville's equivalency demonstration should not have been approved, EPA and the State will determine an appropriate response to ensure that the mill's emissions meet all applicable and appropriate requirements.

Please note that our review of the IP-Prattville pre-draft EBP terms and conditions was coordinated with EPA's Office of Air Quality Planning and Standards, and Office of Enforcement and Compliance Assurance. If you have further questions regarding this EBP action, please contact Lee Page of EPA Region 4 at (404) 562-9131.

Sincerely,


A. Stanley Meiburg
Acting Regional Administrator

Enclosure: No. 1 Kiln
Federally Enforceable Provisos

cc: Donald G. Forst, Mill Manager
IP-Prattville

ONIS "TREY" GLENN, III
DIRECTOR



Alabama Department of Environmental Management
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BOB RILEY
GOVERNOR

July 20, 2009

Carol Kemker, Acting Director
Air, Pesticides and Toxics Management Division
U.S. EPA Region 4
61 Forsyth St.
Atlanta, GA 30303-8960

Dear Ms. Kemker:

On March 31, 2004, the Alabama Department of Environmental Management requested 'equivalency by permit' (EBP) authority, as provided for in 40 CFR 63.94. ADEM requested the authority to implement and enforce Title V permit terms and conditions that substitute for the National Emission Standards for Hazardous Air Pollutants for Chemical Recovery Combustion Sources as listed in 40 CFR Part 63, Subpart MM. That authority was approved through publication in the July 12, 2004 Federal Register, and was effective on September 10, 2004.

Per the second step of the EBP process, the Department is requesting approval of the pre-draft permit terms. Attached is an analysis which includes the proposed Title V language for the International Paper facility located in Prattville, Alabama (Title V Permit No. 201-0001), and a demonstration that the proposed language is equivalent to the underlying MACT standard.

It is the Department's understanding that if EPA finds the pre-draft permit terms and conditions equivalent, it will approve the State's alternative requirement, and notify ADEM in writing.

If you have any questions or comments concerning this request, please contact Wes Thornhill at 334-271-7887 or at jwt@adem.state.al.us.

Sincerely,

Ronald W. Gore, Chief
Air Division

Birmingham Branch
110 Vulcan Road
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Equivalency By Permit Proposal
International Paper – Prattville
201-0001

International Paper operates an existing kraft pulp mill in Prattville, Alabama. The facility is considered a major source of both criteria and hazardous air pollutants, and is subject to Title V permitting and the MACT regulations, specifically those found in 40 CFR Part 63, Subpart MM. The facility's initial Title V permit was issued on November 1st, 2003.

Subpart MM is for the control of HAP emissions at pulp mill combustion sources. §63.862 allows for the use of a 'bubble' to aggregate emissions from multiple sources in order to demonstrate compliance. A requirement of §63.862 is that each piece of equipment included operate at least 6,300 hours per year.

The No. 1 Lime Kiln at International Paper's Prattville facility is a 'swing' unit that operates based on mill demand. The unit has historically operated at greater than 6,300 hours per year; however, the facility anticipates the possibility that this may not always be the case.

Therefore, the facility has requested that language be incorporated into their Title V permit which will allow them to continue to operate under the 'bubble' even if the No. 1 Lime Kiln does not operate for 6,300 hours in a given year.

The ability to grant this alternative is given under the Equivalency-by-Permit provisions of 40 CFR Part 63.94. EPA's up-front approval of ADEM's equivalency-by-permit program was published in the Federal Register on July 12, 2004, and was effective on September 10, 2004.

Emissions Equivalency

It appears that the original intent of requiring a unit to operate 6,300 hours in order to be included in the bubble was to prevent a facility from taking credit for a 'clean' unit, and then not running it, resulting in greater emissions than would have originally been allowed. It should be noted that since the No. 1 Lime Kiln is a debit source under the bubble, as opposed to a credit source, a reduction in operating time results in less emissions to the atmosphere.

In a request dated June 18, 2009, International Paper Prattville proposed the following limitations.

Unit	Subpart MM limit	Subpart MM lbs/hr	Proposed Limit	Proposed Allowables (lbs/hr)
No. 1 Recovery	0.044 gr/dscf @ 8% O ₂	46.06	0.023 gr/dscf @ 8% O ₂	24.08

Furnace				
No. 2 Recovery Furnace (stack 1)	0.044 gr/dscf @ 8% O2	39.09	0.024 gr/dscf @ 8% O2	21.32
No. 2 Recovery Furnace (stack 2)	0.044 gr/dscf @ 8% O2	45.42	0.024 gr/dscf @ 8% O2	24.77
No. 1 Smelt Tank (stack 1)	0.2 lbs/TBLS	5.78	0.25 lbs/TBLS	7.25
No. 1 Smelt Tank (stack 2)	0.2 lbs/TBLS	5.78	0.25 lbs/TBLS	7.09
No. 2 Smelt Tank	0.2 lbs/TBLS	15.92	0.19 lbs/TBLS	14.95
No. 1 Lime Kiln	0.064 gr/dscf @ 10% O2	8.23	0.36 gr/dscf @ 10% O2	46.29
No. 2 Lime Kiln	0.064 gr/dscf @ 10% O2	21.6	0.1 gr/dscf @ 10% O2	33.74
		Total = 187.9		Total = 179.5

By using the calculations listed in §63.862, and including the No. 1 Lime Kiln, IP Prattville is allowed 187.9 lbs/hr of particulate emissions from all Pulp Mill Combustion Sources (column 3). However, in an effort to demonstrate that allowing the No. 1 Lime Kiln to be included in the bubble in spite of its hours of operation would be at least equivalent, the facility has proposed removing the allowables for the No. 1 Lime Kiln from the initial calculation. This would result in a mill allowable of 179.5 lbs/hr. The facility would then distribute those allowables among all the sources (including the No. 1 Lime Kiln) (column 5). The reduction in allowables demonstrates that the proposal of including the No. 1 Lime Kiln in the bubble is more than equivalent to the strictest requirements of Subpart MM.

The Department proposes to include the following language in No. 1 Lime Kiln Section of International Paper – Prattville's Title V permit.

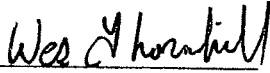
In accordance with 40 CFR Part 63, Subpart MM, particulate matter emissions, as a surrogate for HAPS, shall not exceed 0.36 gr/dscf, corrected to 10% oxygen. This alternative limit was established under the provisions of §63.862 (a)(1)(ii).

The No. 1 Lime Kiln may be included in the bubble provisions of §63.862 (a)(1)(ii) regardless of the number of hours that it operates. This alternative was approved, through the provisions of §63.94, as equivalent to the standards of 40 CFR Part 63, Subpart MM. All other requirements of 40 CFR Part 63, Subpart MM remain in effect.

Appendix 1 includes the complete draft section of the Title V permit for the No. 1 Lime Kiln. Appendix 2 is International Paper's submittal.

Recommendation

It is therefore the Department's determination that the proposed language demonstrates equivalency with the underlying regulation, and is appropriate to be included in the facility's Title V permit as an approved alternative emission standard.



Wes Thornhill, Chief
Industrial Chemical Section
Chemical Branch
Air Division

June 25, 2009

NO. 1 LIME KILN**Summary Page for No. 1 Lime Kiln****Permitted****Operating Schedule:** 24 Hrs/day x 7 Days/week x 52 Weeks/yr = 8760 Hrs/yr**Emission limitations:**

Emission Point #	Description	Pollutant	Emission limit	Regulation
Air Permit 2003 TV Application 501	Lime Kiln	Particulate Matter	No Greater than 1.0 lb/air dried ton of pulp	Rule 335-3-4-.07
Air Permit 2003 TV Application 501	Lime Kiln (State only)	Total reduced sulfur	No Greater than 20 parts per million at 10 percent oxygen	Rule 335-3-5-.04
Air Permit 2003 TV Application 501	Lime Kiln	Opacity	No Greater than 20 percent with one six-minute period up to 40 percent in any one hour period	Rule 335-3-4-.01
Air Permit 2003 TV Application 501	Lime Kiln	Particulate Matter (surrogate for HAPs)	0.36 grains/dry standard cubic foot	Rule 335-3-11-.06 (38)

NO. 1 LIME KILN

No. 1 Lime Kiln - Federally Enforceable Provisos	Regulations
1. Applicability	
1. The No. 1 Lime Kiln is subject to the applicable requirements of Rule 335-3-16-.03, "Major Source Operating Permits".	Rule 335-3-16-.03
2. This source is subject to the requirements of ADEM Admin. Code 335-3-4-.07 (2) (c) particulate matter from kraft pulp mill lime kilns.	Rule 335-3-4-.07 (2)(c)
3. This source is subject to the requirements of ADEM Admin Code 335-3-4-.01 for opacity.	Rule 335-3-4-.01
4. This source is subject to the requirements of National Emission Standards for Hazardous Air Pollutants as listed in 40 CFR Part 63, Subpart MM.	Rule 335-3-11-.06 (38)
2. Emission Standards	
1. Particulate matter emissions shall not exceed 1.0 pounds per air-dried ton of pulp.	Rule 335-3-4-.07 (2)(c)
2. Opacity shall not exceed twenty percent as determined by six-minute average. During one six-minute period in any sixty-minute period, a person may discharge into the atmosphere from any source of emission, particulate of an opacity not greater than that designated as forty percent.	Rule 335-3-4-.01
3. In accordance with 40 CFR Part 63, Subpart MM, particulate matter emissions, as a surrogate for HAPS, shall not exceed 0.36 gr/dscf, corrected to 10% oxygen. This alternative limit was established under the provisions of §63.862 (a)(1)(ii).	Rule 335-3-11-.06 (38)
The No. 1 Lime Kiln may be included in the bubble provisions of §63.862 (a)(1)(ii) regardless of the number of hours that it operates. This alternative was approved, through the provisions of §63.94, as equivalent to the standards of 40 CFR Part 63, Subpart MM. All other requirements of 40 CFR Part 63, Subpart MM remain in effect.	
3. Compliance and Performance Test Methods	
1. Compliance with the particulate matter emission limit shall be determined in accordance with 40 CFR Part 60, Appendix A,	Rule 335-3-14-.02

NO. 1 LIME KILN

Method 5.

2. Compliance with the opacity limit shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9. Rule 335-3-4-.01

4. Emission Monitoring

1. A particulate matter emission test shall be performed at least once per year. Rule 335-3-5-.02
2. In accordance with 40 CFR Part 63, Subpart MM, the facility shall monitor the wet scrubber liquid supply flow rate and pressure drop. The parametric monitoring system shall meet the requirements listed in §63.8(c). Rule 335-3-11-.06 (38)

This unit shall not have 6 or more 3-hour average parameter values within any 6-month reporting period that are outside the range of values established in accordance with §63.864 (j) and (k). No more than one exceedance will be attributed in any given 24-hour period.

3. Since this unit is controlled by a wet scrubber, opacity periodic monitoring will be satisfied through particulate emission periodic monitoring. Rule 335-3-16-.05
4. For particulate matter monitoring, if any three-hour rolling average lime mud feed rate is greater than 110 percent of its average value set by the required complying periodic test, or a complying test approved by the Department, the feed rate is to be lowered until compliance is successfully demonstrated at the higher rate. Rule 335-3-16-.05

5. Recordkeeping and Reporting Requirements

1. A particulate matter emission test report shall be submitted to the Department at least once per year. Rule 335-3-14-.02
2. Records of all three-hour rolling average lime mud flow rates shall be made and maintained on file, available for inspection, for at least five years. Rule 335-3-14-.02
3. In accordance with 40 CFR Part 63, Subpart MM the facility must develop a written Start-up, Shut-down, and Malfunction plan that contains the information required in §63.6 (e) and §63.866 (a). Rule 335-3-11-.06 (38)

NO. 1 LIME KILN

4. In accordance with 40 CFR Part 63, Subpart MM the facility must maintain records of any occurrence when corrective action is required (when a 3-hour average flow rate or pressure drop is outside the established range of values), and when a violation is noted (when six or more 3-hour average flow rate or pressure drop values within any 6-month reporting period are outside the established range of values)

Rule 335-3-11-.06 (38)

5. In accordance with 40 CFR Part 63, Subpart MM the facility must maintain records of parametric monitoring data required in §63.864, including any period when the 3-hour average flow rate or pressure drop were inconsistent with the levels established during the initial performance test, with a brief explanation of the cause of the deviation, the time the deviation occurred, and the time corrective action was initiated and completed, and corrective action taken.

Rule 335-3-11-.06 (38)

The facility must also maintain records and documentation of supporting calculations for compliance determinations made under §63.865 (a) through (d).

The facility must also maintain records of the monitoring parameter ranges for the pressure drop and scrubber flow rates.

6. In accordance with 40 CFR Part 63, Subpart MM the facility must submit an Excess Emissions Report containing the information required in §63.867 (c), as well as the number and duration of three hour averages when the flow rate or pressure drops were outside the established range.

Rule 335-3-11-.06 (38)

The report is required to be submitted quarterly if there is an exceedance of parameters, or semi-annually if there is not.

State Only Enforceable Provisos**1. Applicability**

1. The No. 1 Lime Kiln is subject to the requirements of ADEM Admin. Code 335-3-5-.04 (6) concerning total reduced sulfur from kraft pulp mill lime kilns.

Rule 335-3-5-.04 (6)

2. Emission Standards

1. Total reduced sulfur emissions shall not exceed 20 parts per million at 10 percent oxygen averaged over discrete 12 hour periods. If an owner or operator demonstrates to the

Rule 335-3-5-.04 (6)

NO. 1 LIME KILN

satisfaction of the Director that emissions in excess of the levels otherwise authorized in this regulation occur as a result of properly performed startups, shutdowns or unavoidable malfunctions these emissions will not constitute a violation.

3. Compliance and Performance Test Methods and Procedures

1. Compliance with the total reduced sulfur emission limit shall be determined in accordance with the continuous emission monitor, 40 CFR Part 60 Method 16, 16A or 16B Rule 335-3-5-.04 (6)

4. Emission Monitoring

1. A total reduced sulfur continuous emission monitor shall be installed, calibrated, maintained, and operated in accordance with 40 CFR §60.284, except that monitoring spans may be approved by the Director. Rule 335-3-5-.04 (6)

5. Recordkeeping and Reporting Requirements

1. A report of excess total reduced sulfur emissions, as defined below, will be submitted to the Department for each calendar quarter within the month following the end of the quarter. The reports will include the following information: Rule 335-3-5-.04 (6)
 - a. The magnitude of excess emissions greater than 20 parts per million adjusted to 10 percent oxygen computed from twelve hour averages (data recorded during periods of total reduced sulfur emission monitoring system breakdowns, repairs, calibration checks and zero and span adjustments shall not be included in the data averages).
 - b. The date and time of commencement and completion of each time period of excess emissions.
 - c. The nature and cause of the excess emissions (if known) and the corrective action taken or preventative measures adopted.
 - d. The date and time identifying each period during which the total reduced sulfur emission monitoring system was inoperative (except for zero and span checks) and the nature of the system repairs or adjustments.
 - e. When no excess emissions have occurred and the total reduced sulfur emission monitoring system was not inoperative or did not require repairs or adjustments, such information will be stated in the report.

June 25, 2009

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Wes Thornhill
Air Division
Alabama Department of Environmental Management
P. O. Box 301463
Montgomery, AL 36130-1463

Subject: International Paper, Prattville Mill
MACT II Bubble – Equivalency by Permit

Dear Mr. Thornhill:

International Paper's Prattville Mill has six sources subject to 40 CFR 63 Subpart MM - National Emissions Standard for Hazardous Air Pollutants for Chemical Recovery Combustion at Kraft, Soda, Sulfite and Stand-Alone Semichemical Pulp Mills (MACT II).

The facility has elected to demonstrate compliance with the standards for HAPS metals under the "bubble" provisions of 40 CFR 63.862(a)(1)(ii). The standard states that the owner or operator of an existing kraft pulp mill may establish alternative particulate matter (PM) emission limits for each recovery furnace, lime kiln, and smelt dissolving tank source, provided the overall PM emission limit is not less stringent than the total allowed by emission limits for individual sources in 40 CFR 63.862 (a)(i). The MACT II rule source emission limits and the proposed emission limits for each source are given in the attached table. The calculations to establish the overall facility "bubble" limit were made using the EPA Spreadsheet Software for performing calculations related to the PM bubble compliance alternative, with the Results tables attached.

As written, the "bubble" provisions discussed above can only be applied to sources that operate 6,300 hours per year or more. The Prattville Mill has requested authority from ADEM to operate under "Equivalency by Permit" (EBP), which will enable us to incorporate the "bubble" limit discussed above while maintaining flexibility to reduce the operating hours for the No. 1 Lime Kiln. The direct final rule and the proposed rule to approve Alabama's EBP program was signed by EPA and was published in the Federal Register as a direct final rule on July 12, 2004.

The No. 1 Lime Kiln at the Prattville Mill is a "swing" unit that operates on mill demand. The unit has historically operated at greater than 6,300 hours per year; however due to economic and operational conditions, the facility requests the option of operating the No. 1 Lime Kiln fewer operating hours. The facility is seeking the operational flexibility on this source because it is the less efficient kiln at the facility. On a per unit of lime mud basis, processing of lime mud in the No. 1 Lime Kiln requires more fossil fuel usage and generates more air emissions than in the No. 2 Lime Kiln.

The emission limits proposed for the No. 1 Lime Kiln make it a "debit" source under the facility's MACT II "bubble." As such, a reduction in operating time on this source results in less overall emissions from the facility. To demonstrate that the emissions allowed with the proposed limits are not only equivalent, but are, in fact, more stringent than those allowed under the source rule, the Prattville Mill is proposing to voluntarily reduce the overall facility "bubble" by the No. 1 Lime Kiln source rule emission allowance. The overall facility "bubble" calculated with all sources equals 1.38 lbs/TBLS. The facility is proposing emission limits which would only allow 1.32 lbs/TBLS, which is equivalent to the "bubble" calculated with the No. 1 Lime Kiln emissions allowance set at zero.

If you have any questions or need additional information, please contact Martha Sims at (334) 361-5048.

Sincerely,

Donald G. Forst
Mill Manager

INTERNATIONAL PAPER PRATTVILLE MILL
EQUIVALENCY BY PERMIT
MACT II BUBBLE
PROPOSED LIMITS TO EQUAL BUBBLE w/o LK1

Unit	Rule Source Limits (\$63 Subpart MM)	Calculated Emissions Using Rule Source Limits (\$63 Subpart MM)	Rule Source Limits Calculated w/out LK1 (\$63 Subpart MM)	Calculated Emissions Using Rule Source Limits Calculated w/out LK1 (\$63 Subpart MM)	Proposed Limits to include in Title V Permit	Proposed Limits (calculated on lb/TBLS basis to demonstrate equivalency)	Calculated Emissions Using Proposed Limits
RF1	gr/dscf @ 8%	lb/hr	gr/dscf @ 8%	lb/hr	gr/dscf @ 8%	lb/TBLS	lb/hr
	0.044	46.06	0.044	46.06	0.023	0.42	24.08
RF2-1	gr/dscf @ 8%	lb/hr	gr/dscf @ 8%	lb/hr	gr/dscf @ 8%	lb/TBLS	lb/hr
	0.044	39.09	0.044	39.09	0.024	0.54	21.32
RF2-2	gr/dscf @ 8%	lb/hr	gr/dscf @ 8%	lb/hr	gr/dscf @ 8%	lb/TBLS	lb/hr
	0.044	45.42	0.044	45.42	0.024	0.62	24.77
SDT1-1	lb/TBLS	lb/hr	lb/TBLS	lb/hr	gr/dscf	lb/TBLS	lb/hr
	0.20	5.78	0.20	5.78	0.040	0.25	7.25
SDT1-2	lb/TBLS	lb/hr	lb/TBLS	lb/hr	gr/dscf	lb/TBLS	lb/hr
	0.20	5.78	0.20	5.78	0.045	0.25	7.09
SDT2	lb/TBLS	lb/hr	lb/TBLS	lb/hr	gr/dscf	lb/TBLS	lb/hr
	0.20	15.92	0.20	15.92	0.120	0.19	14.95
LK1	gr/dscf @ 10%	lb/hr			gr/dscf @ 10%	lb/TBLS	lb/hr
	0.064	8.23			0.360	1.15	46.29
LK2	gr/dscf @ 10%	lb/hr	gr/dscf @ 10%	lb/hr	gr/dscf @ 10%	lb/TBLS	lb/hr
	0.064	21.60	0.064	21.60	0.100	0.35	33.74
MACT	lb/TBLS	lb/hr	lb/TBLS	lb/hr		lb/TBLS	lb/hr
	1.38	187.9	1.32	179.6		1.32	179.5